Power Projection and Countermine Operations



U.S. Navy (August Sigur)

Marine preparing to set contact mine.

By ANTHONY E. MITCHELL

The Quadrennial Defense Review, Commission on Future Defense, National Defense Panel, and other efforts have reviewed and projected the security environment and force requirements that will make the military effective in the 21st century. The Navy has been leading that revolution by disengaging from Cold War thinking and redirecting its systems and procurement in support of *Forward . . . from the Sea*. Unfortunately, this shift brings risks to critical programs—particularly countermine operations—which, if not corrected, could be tragic in the event of war.

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Reshaping Capabilities

The strategic focus of the military is evolving. As the force changes, some less glamorous but vital roles and missions on the periphery must also evolve. The Air Force is searching for a niche in forward presence, the Army is moving from a reliance on forward bases to enhancing its power projection capabilities, and the Navy-Marine Corps team has implemented the strategy in *Forward . . . from the Sea*.

Once logisticians relied heavily on host nation support to enhance the transportation and support functions of the Reserve components. Now the stockpiles of equipment and arms that once filled the prepositioned overseas matériel configured to unit sets (POMCUS) depots of Europe are afloat, ready to be dispatched to any

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55th Signal Company (Alfredo Barraza, Jr.)

Croatian police divers inspecting hull of *USNS Soderman*.

contingency. The Navy-Marine Corps team is continually expanding its power projection capacity with new combatant and amphibious ships and associated weapon systems. Maritime prepositioned assets continue to grow. Even the Air Force has placed some of its logistics afloat in prepositioned ships for surge on short notice.

The Gulf War was the first major post-Cold War test of time-critical power projection. Desert Storm demonstrated that power projection is no simple task. Quickly deploying heavier, larger, and more maintenance-intensive equipment was the norm in the Persian Gulf. Nine hundred-foot roll-on/roll-off (RORO) ships were continually unloaded at two Saudi ports. Luckily for U.S. forces, Saudi ports are some of the best in the world, and the approaches from the Persian Gulf were relatively secure from interdiction from the sea before and during the Iraqi occupation of Kuwait. That security advantage was significant because the civilian-manned RORO ships depend solely on combatant escorts for protection. The experience of Desert Storm raises an important question for the future. Since mobility is the key ingredient in power projection, conflicts that lack a cooperative host in theater will strain the planning and execution of our strategy. How can we ensure that we find the same level of infrastructure and security we enjoyed in Saudi Arabia while planning for future conflicts?

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The Mine Warfare Threat

There is much we can do to safeguard our sealift assets in littoral power projection operations. One area in need of significant improvement is mine countermeasures. Iraq had only three noteworthy successes against the allies in the Gulf War. One was the Scud missile hit on an Army dining facility in Saudi Arabia that caused numerous casualties. The other two were mines that took *USS Princeton* and *USS Tripoli* out of the war for the duration. These successes, albeit small, were noticed by rogue states and hostile governments. The enhanced Patriot missile system and the Navy's Aegis weapon system, now capable of providing theater ballistic missile defense, have made further Scud success unlikely. Unfortunately, mine warfare has neither maintained sufficient visibility nor obtained the budget increases to function fully in our expanded power projection strategy. In his primer on mine warfare, Gregory Hartmann summarizes, "Mines not only sink and damage ships as other weapons can, but their effectiveness is also measurable in terms of the delay created in enemy operations."[1] Unlike Desert Storm, future conflicts may suffer strained mobility if mines are deployed and the theater lacks cooperative host governments.

In the current economic climate, few nations can develop and finance a navy or air force that could challenge the United States as a peer rival. But wholesale use of naval mines could be an easy, effective, and low-cost counter to a strong power projection force. If our shortfalls in mine warfare remain uncorrected, how might potential aggressors take advantage of our inaction?

Every type of naval mine is available in the global marketplace. At the Paris International Naval Exposition in 1996 manufacturers offered many such weapons for sale, from sophisticated bottom influence mines to simple contact mines enhanced to reduce sonar detection. Many despots and unstable states have stockpiles of naval mines. As Western nations increase the sophistication of weapons, potential enemies unable to keep pace turn to simple, cheap, yet proven counters.

Studies of World War II through Desert Storm recognize shortfalls in mine countermeasures and recommend a greater application of resources.[2] Navy planners and designers are developing an organic mine warfare capability within the surface force. While that may increase mine detection and avoidance in cruisers and destroyers, it must not be deemed a panacea that diverts resources and training from dedicated mine warfare forces—which now are headed toward obsolescence. Before dismissing dedicated mine warfare forces becomes policy and its funding is reprogrammed, it is prudent to conduct a joint conference outlining mine warfare requirements



Fleet Combat Camera Group Pacific (Jonathan Guzman)

Royal Navy mine countermeasures squadron, Arabian Gulf.



U.S. Navy (Christopher Halloway)

Detonating mine, RIMPAC '98.

for the future versus current capabilities. Additionally, wargaming forced entry into an undeveloped theater may further highlight unexpected shortfalls in force protection and logistics.

A Languishing Force

There has been intense pressure to mainstream mine warfare to support power projection and *Forward . . . from the Sea* strategies. The Mine Warfare Command has been proactive in both recognizing its new responsibilities and adapting to our changed strategic focus. Unfortunately, few members of the budget and planning communities in the Pentagon or Congress recognize the overshadowing importance of a robust mine warfare capability in enabling our future power projection force. Funding and development should be of primary concern to all services, yet as in the past we see the dedicated mine warfare force beginning to languish.

Interest on the part of Secretary of Defense William Cohen in mine warfare is well documented, but reductions in defense spending and a simultaneous shift in strategy have created a spending dilemma.[3] Concern at the level of the Secretary is encouraging; but as J.M. Martin pointed out in 1991:

During the decades associated with 13 wars and lesser hostilities since World War II where sea mines have been used, U.S. preparedness for sea mine warfare has been neither uniform nor continuous. Rather, support for this endeavor in both the Department of Defense and the Congress has been marked by peaks and valleys, a fluctuating process which has caused the U.S. Navy to enter conflicts inadequately prepared for mine warfare.[4]

Mine warfare needs have been recognized periodically by policymakers and in many articles identifying deficiencies. The question is where to get funds to enhance mine warfare training and technology in an environment of reduced defense expenditures.

Building for the Future

A possible way to bridge budget shortfalls would be to fund critical countermine programs



U.S. Navy

Mine countermeasures support ship *USS Inchon*.

through an apportionment of any cash excesses generated by the DOD working capital fund.[5] That would require adjusting current rate structures to allow for a joint sealift protection apportionment that could be used to cover cost overruns and unexpected expenses in active programs, especially research and development. Other funding sources also need exploration. Considering the power projection strategy of the future, all the services are guaranteed to benefit, increasing funding to countermine capabilities.

Requirements for dedicated mine countermeasure forces should be set by the total surface force. One approach is to design mine warfare ships that are multicapable. By adding a weapon system and using new technology in degaussing and metallurgy along with composite materials to control magnetic signature, the next-generation mine countermeasures ship could become a regular deployable asset and take on additional missions such as law enforcement operations and maritime interdiction operations. Transferring those tasks from overtaxed cruisers and destroyers would ease the cost and time strains of maintaining blue-water combatants, increasing their combatant readiness by allowing them to focus on training and operating predominantly in their primary warfare missions. Such missions would then be executed by smaller craft like mine warfare ships which require less fuel and fewer personnel. Furthermore, an American designed and built corvette-sized ship may inspire foreign military sales that would bolster our shipbuilding industry.

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Budgeteers should realize that mine warfare is no longer a strictly Navy but a joint problem that challenges the power projection capability of all services. Funding new technologies and training is critical to a robust capacity. We must carefully consider the follow-on to current mine countermeasure ships, MH–53 helicopters, and the mine warfare command and control ship *USS Inchon*. Furthermore, mine warfare must continue to occupy the mainstream of defense thinking. The designs and technology that make dedicated mine warfare ships appropriate for other surface force missions are at hand. Without an infusion of funding and continued support for development, capabilities like mine warfare that receive little interservice attention during major strategy shifts may prove to be our Achilles heel. **JFQ**

NOTES

[1] Gregory K. Hartmann and Scott C. Truver, *Weapons That Wait: Mine Warfare in the U.S. Navy* (Annapolis: U.S. Naval Institute Press, 1991), p. 235.

[2] Lack of attention to mine countermeasures is a recurring theme in post action reports. See also Tamara Moser Melia, *"Damn the Torpedoes": A Short History of U.S. Naval Mine Countermeasures, 1777–1991* (Washington: Naval Historical Center, 1991) and Hartmann, *Weapons That Wait*, as well as various articles in *U.S. Naval Institute Proceedings*.

[3] Roman Schweitzer, "Cohen's Message on Mine Warfare Understood by Navy Senior Leaders," *Inside the Navy*, November 10, 1997, p. 1.

[4] J.M. Martin, "Desert Storm: We Still Haven't Learned," *U.S. Naval Institute Proceedings*, vol. 117, no. 7 (July 1991), p. 68.

[5] The defense working capital fund was formally known as the defense business operating fund. One of its business areas is Navy research and development.